

CLARKE (A.P.)

al

The Advantages of Version
in a
Certain Class of Obstetric Cases

BY

AUGUSTUS P. CLARKE, A.M., M.D.
Fellow of the American Association of
Obstetricians and Gynecologists,
Cambridge, Mass.

REPRINTED FROM

THE AMERICAN JOURNAL OF OBSTETRICS
Vol. XXVI., No. 5, 1892

NEW YORK

WILLIAM WOOD & COMPANY, PUBLISHERS
1892

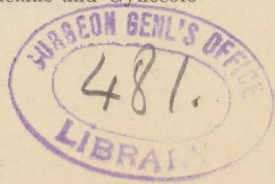


THE ADVANTAGES OF VERSION

IN A
CERTAIN CLASS OF OBSTETRIC CASES.¹

VERSION, as an operation resorted to in obstetric practice, is of very ancient date ; it was evidently not unknown to Hippocrates, for the art of midwifery received much attention as early as the time in which he wrote. From time to time at a later date the method by version had its advocates and its opponents. The advocates and opponents were in turn undoubtedly sometimes actuated solely by caprice, or were influenced, for a while at least, by the occurrence of cases in which the practice was to a large extent seemingly successful, and at other times were governed in their practice by the occurrence of cases in which failure resulted through its indiscriminate employment. The operation by version was, however, revived in Paris in 1550, after the advantages had been illustrated by the teachings and practice of Ambroise Paré. In Great Britain this method of procedure seemed for some time to have fallen

¹ Read before the American Association of Obstetricians and Gynecologists, September, 1892.



into disrepute, owing no doubt to the appearance of the obstetric forceps invented by the Chamberlens. Though the great masters in obstetric work had been in some degree successful in the employment of version, its use nevertheless was not generally adopted. The cases in which it was resorted to were indiscriminately selected; the results thus obtained could not be grouped in a manner to indicate what should be a safe method of proceeding. Version, in falling into disuse, shared only the fate of many other excellent methods of management that failed to gain preference with the operator. The celebrated Baudelocque,¹ first accoucheur of the Hospital La Maternité, did much in bringing before the profession again the advantages this method afforded. Sir James Y. Simpson, of Edinburgh, in his large contribution to the obstetric branch, demonstrated that the fetal head in diameter at its base is often less than it is at its vertex or at its interparietal segment. Simpson, in adopting the method of version, was able to carry out the practice with great facility by availing himself of the discovery made at that time of the employment of anesthetic agents. He unquestionably added an interest and a dignity to the obstetric work. The influence of his great name did much toward re-establishing the method of version. Among the arguments urged in its behalf was that it could be resorted to in an early stage of labor, whereas in using forceps it was necessary to wait until the os uteri was fully dilated. By an early resort to version the medical attendant is often able to prevent the exhaustion and other severe results which are liable to occur before the cervix uteri has dilated sufficiently to warrant the employment of forceps. It was also thought that the fetal head sustained less compression when delivery was delayed or was effected by other means. The employment of obstetric instruments, or of any means other than the hand, in delivery, began to be looked upon at best as of doubtful utility. As regards the results to the fetus, it was held that the chances of saving its life were greater than by the use of the long forceps. Compression of the funis and overextension of the neck, which are the chief dangers to the child in version, may be overcome in great measure by the increasing dexterity acquired on the part of the operator. Among the causes demanding

¹ "Art des Accouchements," 1781.

artificial delivery was narrowness of the pelvis or contraction at the brim. In cases in which the brim was immoderately contracted craniotomy was the alternative. Craniotomy was also resorted to in cases in which delivery by version was attempted when the fetal head failed to pass the brim. Another argument advanced in justification of version, when the child could not be saved, was that the mother's life should be regarded as of greater consequence than that of the child. This, no doubt, is a sound principle for guidance in obstetric practice, but it should be supplemented by another principle, recorded among the canons sacredly preserved, that in delivery no expedient should be resorted to that will jeopardize the life of the child until the other means giving reasonable promise of happier results have been tried and have failed.

Improvement from time to time in surgical instruments has aided in the development of the forceps better adapted for use in cases in which the head is arrested at or above the brim. The forceps should be of sufficient length and of the requisite curve for effecting delivery. Barnes' double-curved forceps is a most admirable instrument for cases in which the head is arrested above the pelvic brim.

Tarnier's axis-traction forceps, though somewhat complicated, often fulfils the highest expectations. The axis traction is particularly useful in cases in which the head has too great a tendency to mount upward against the symphysis pubis. The force expended in the traction can be used or distributed to a greater advantage. The axis-traction as modified by A. R. Simpson and by others affords an almost incalculable advantage for delivery. In a paper¹ entitled "A Certain Class of Obstetric Cases in which the Use of the Forceps is imperatively Demanded," read in the Section of Obstetrics and Diseases of Women of the American Medical Association, I have made mention of the results of my general experience with the use of forceps. In that paper I have expressed my preference for the use of forceps instead of resorting to internal version. By the use of the forceps the mother has escaped many dangers; there has been a great saving of fetal life. In a paper which I read before the Middlesex South District Medical Society, July 15th, 1885, I gave the results of a series of one thousand

¹ Journal of the American Medical Association, 1891.

obstetric cases occurring in my early practice. From a summary of that contribution I abstract the following facts relating to the employment of the forceps and of version:

Long forceps cases.....	37
“ “ case for head in utero.....	1
“ “ cases “ “ at brim.....	26
“ “ “ “ “ medium.....	10
Children living.....	26
“ dead.....	11

One child died next day of hemorrhage from the lungs; this child appeared perfect when born. Two children were dead before the forceps was applied. Five children were very large and the pelvis of each mother was very narrow. One woman was in labor three days, the membranes having ruptured before the labor began; she died of hereditary phthisis a few years later; she was never pregnant after the first time. One child was feeble; the mother died of uremic convulsions. One child was dead and the membranes had ruptured before the beginning of labor; the mother had uremic convulsions, but recovered.

Version cases.....	16
Children living.....	4
“ dead.....	12

One case, a breech presentation at brim, cord pulseless; mother had experienced a great deal of mental excitement from domestic affairs. Another case was a breech presentation; the pelvis was too narrow for the head of the child to pass—the head was very large.

Another case, head at brim; ether had been given at an early stage; there had been some delay. This was the thirteenth child; the twelfth child of this woman was born by the aid of forceps applied by another physician, but the child was disfigured and lived but a few minutes. The eleventh child of this woman was born without the aid of forceps, but it died of convulsions within twenty-four hours from birth.

For the tenth child I was compelled to use the long forceps; the head was at the brim, and it was with great difficulty that I succeeded in extracting it. During the labor in this case I gave constant attendance for nearly three days.

Another case, the head was at the brim. Exhausting hemor-

rhage previous to my being called. Long forceps failed. Version was resorted to, but the child was cyanosed; the mother did not rally, owing to the great loss of blood previously sustained.

Another case, the second labor, version was resorted to; the child was stillborn. In the first labor the long forceps failed; the perforator had to be employed. In this case the mother had a figure-of-eight pelvis; it was narrow, too narrow for a living child at full term to pass.

Another case in which uremic convulsions occurred before the labor pains began. Manual dilatation and version were tried. The child was dead; mother did not recover.

Another case, head at the brim; long forceps slipped; version; child was feeble and lived but a short time; the mother died of septicemia.

Another case in which the pelvis was very narrow; the membranes ruptured two days before the labor began. Long forceps failed; head at the brim; there was much hemorrhage. Version was attempted; perforation of the head was finally resorted to. The mother was a feeble woman; she sank and died from the combined effects of shock and loss of blood.

Another case in which the child was dead; the cord had prolapsed and was found pulseless. The head was large. No movement of the child had been felt for some days before the labor began. Long forceps failed; had recourse to version; mother recovered.

Another case in which a shoulder presented. External manipulation and long forceps failing, version was resorted to. The placenta was found diseased.

Another case in which uremic convulsions occurred; manual dilatation and version were tried; the head was at the brim; the child lived but a few hours. The mother ultimately recovered.

Brief summary of the version cases: Both mother and child lived in four cases. Both mother and child died in four cases. Eight mothers recovered, but lost their children.

Summary of the long-forceps cases: Both mother and child died in four cases. Both mother and child lived in twenty cases. Two children lived, but their mothers died. Seven mothers lived; their children died.

It will thus be seen that the results of the management of the cases here given are largely in favor of the employment of forceps instead of version. Cases occasionally occur in which delivery cannot with any degree of safety be effected by the use of forceps. A case of this kind occurred in my practice April 22d. The patient was aged 40 years. This was the thirteenth labor; she had been in labor some six hours before my arrival. The membranes had ruptured and the os was fully dilated. The conjugate diameter of the pelvis was three and one-fourth inches; the transverse diameter was four inches; the oblique, or the diameter of Deventer, was four and three-fourths inches. The labor pains were very strong, with occiput presenting anteriorly. The head engaged at the brim, but made no further descent. The promontory of the sacrum was unduly developed; the soft parts were fully relaxed. The funis had prolapsed and was pulseless.

For the next two hours the pains were strong and regular; soon after the patient complained of being weak, and her symptoms indicated that she was becoming exhausted. Ether was administered and the long forceps was applied, but the head refused to descend. Strict antiseptic precautions had been instituted from the onset of the labor. Dr. A. H. Tuttle came to my assistance; ether was continued and the forceps with axis traction was tried again, but failed us. Version was then attempted. A little difficulty in reaching the feet was encountered, owing to the unyielding condition of the head, which was closely wedged within the pelvic brim. With careful management and perseverance the feet were seized and brought down; the head at its base readily entered the brim, but became arrested at its interparietal segment. Continued traction at the feet, with manipulation of the head, quickly resulted in effecting a reduction of the transverse diameter. The head then readily passed the introitus and emerged at the angustia perinealis. The fetus, though large, was not disfigured. The measurements of the several diameters of the head exceeded those of a typical one. The biparietal diameter was upward of five inches, the occipito-mental six inches, the occipito-frontal five and one-half inches, and the occipito-bregmatic four inches. It will, moreover, be seen that each of the several diameters of the fetal head was greater than the cor-

responding diameters of the pelvis of a well-formed woman, and considerably greater than each of the diameters of the mother's pelvis, as mentioned in this paper. The measurements of this mother's child born at her twelfth labor, which occurred September 6th, 1888, were not as great. The biparietal diameter was only four and a half inches; the other diameters, except the occipito-frontal, were also less. When I was called to the patient in her twelfth labor she had been in pain many hours and her physician had been in constant attendance; the os and cervix were fully dilated, but the head had not engaged at the pelvic brim. After the patient had been fully etherized the use of the long forceps, which had been curved sufficiently to allow the convex edges to sweep the hollow of the sacrum, brought the labor to a happy termination. It is sometimes surprising to see what a slight difference in the increase in some of the diameters of the fetal head will retard the progress of labor. Two and a half years ago I was called to a woman whom I had before attended in nine consecutive labors. In this tenth labor I experienced unusual difficulty in effecting delivery. I was compelled to resort to the use of the long forceps; the head had engaged at the pelvic brim, but could make no further descent. The biparietal diameter of this child was four and a half inches; it was only from one-third to one-half inch greater than had occurred in the same diameter of any one of the other nine children. I have had occasion before to remark that the help to be derived by the use of forceps implies a normal or a nearly normal proportion of the pelvic cavity. When, however, the pelvis has undergone any considerable deformity, the employment of the forceps is liable to be attended with failure to effect delivery. In a case of pelvic deformity of the right side to which I was called in consultation, the first stage of labor went on well. The head failing to engage at the brim, forceps by the attending physician was unsuccessfully applied before my arrival. Ether was again administered, and version was decided upon and was effected by carrying the fetus to the left, and by directing the base of the head to the right acetabulum, so that the bregma could easily sweep the left sacro-iliac synchondrosis and then pass beneath the acetabulum, where the pelvic basin had suffered the least from the distortion; the child survived and the mother

did well. Fortunately the interparietal diameter measured only three and one-half inches; the occipito-frontal diameter exceeded a normal one, but the passage of the head was favored by an originally large conjugate diameter of the mother's pelvis, though the pelvis as a whole was markedly distorted. An advantage to be gained in resorting to version and in having the head engage at the base is that compression of the parietal segments will go on more regularly, naturally, and safely. In a case to which I was called in consultation some weeks since I was able to adjust fairly well both blades of the forceps, but on making firm traction I observed that there was beginning to take place an undue compression or an overlapping of the right parietal at the junction of the temporal bone. The pelvic cavity on the right was distorted in a marked degree. I have no doubt, had I persevered with forceps, delivery could have been accomplished, but only at the risk of the life of the child. The child was born alive, but the appearance of the head justified the course I pursued in resorting to version. Another advantage version sometimes has over the employment of forceps is when the head rests over or upon the brim, and the blades of the forceps can only be applied at the occipito-frontal portion. In such a case, when there is contraction at the brim, compression following traction on the forceps will cause projection of the lateral segments toward either extremity of the antero-posterior diameter of the pelvis, and thus prevent engagement of the head or its descent through the pelvic cavity.

Version offers an advantage in a case in which craniotomy in a previous labor was found necessary by reason of a contracted brim. I have records of such a case, in which I saved the child by version; the mother in the two previous labors, according to her history, was delivered by craniotomy after the long forceps had failed.

To another patient, Mrs. C., age 23 years, I was called; it was her third labor. Delivery in the two previous labors was effected by instruments; the children were stillborn. When I was called the head was at the brim, but did not engage; the conjugate diameter was three inches, the transverse was three and one-half inches, and the diameter of Deventer was four and one-half inches; the left side was straighter than the right. This seemed to be a case in which version should be employed.

The patient was profoundly etherized, but it was found necessary to exercise unusual traction before the head could be made to enter the brim. There was much delay in disengaging the head at the outlet. The child, however, was born alive and did well. The fetal head was hard and broad at the vertex. The head had been slow in undergoing compression sufficient for its descent through and along the arch of the pubes. Careful examination after the child was born showed that the bones of the fetal head overlapped in such a manner as to cause no serious damage to the brain.

Another case to which I was called was that of Mrs. C., age 20 years; it was her first pregnancy. She had been in labor twenty-seven hours; the chin presented under the arch of the pubes. The left side of the pelvis was straight. Version was resorted to and the child was born alive, though the forehead, eyes, and lips were much discolored and swollen. Version can be most advantageously resorted to in that class of cases in which much flatness of the pelvis prevails, and in which the head presents at the brim, with a cervical lateral obliquity having the anterior or the posterior portion of the parietal bone and the sagittal suture appear in a transverse direction. The presentation may be either posteriorly at the promontory of the sacrum, or anteriorly at the arch of the pubes. In a case with such factors to be dealt with the forceps may be tried, but my experience justifies me in saying that the timely use of version will yield the larger percentage of successful results. Among the causes adding to the difficulty in version is the impinging on the scapula, or the grasping of it, by the fibres of the internal cervix when in a partial state of dilatation. This condition of things interferes with the accomplishment of the necessary rotation of the fetal body, and, if not recognized by the obstetrician, the management may be fraught with much disaster. The remedy, as pointed out by Dr. Herman,¹ is most simple. It consists in pressing the point of the shoulder toward the middle line of the cervical canal while traction is made on the feet; this method of procedure liberates the shoulder and allows delivery easily to be effected. The employment of the long forceps for high operation has,

¹ Transactions Obstetrical Society of London; also Braithwaite's Ret., part 94.

with some obstetricians, become very popular. The practice has been more general since the introduction of the axis-traction method. Barnes¹ formerly resorted to version, but his greater experience has led him to believe that the cases were very rare in which Tarnier's forceps was not superior to version. In answer to this statement it should be said that it is in this rare class of cases the appeal is offered for the employment of version. Dr. Peter Lodwick Burchill,² surgeon-accoucheur to the city of London Lying-in Hospital, makes mention in detail of forty-five cases of lingering labor which occurred out of a total of eight thousand cases. These lingering cases were successfully managed by resort to version. By this plan thirty-eight children were saved, with no fatal results to any of the mothers. Other writers also have offered evidence in favor of the advantages to be derived by version in certain cases of contracted brim or of lingering labor. The employment of version in all cases of lingering labor is far from what I intend to advocate. Such a practice to be adopted for all cases, now that we have other means that can be used for relief, would, I believe, be most unwise, if not pernicious. In those exceptional cases which sometimes appear to baffle the highest skill, the method for relief should not be according to any iron-clad rule, because success in this, as in all difficult accomplishments, can be expected to follow only after the exercise of good judgment, after taking wise counsel, and often after the attainment of large experience. In this connection I cannot refrain from mentioning what Dr. Champneys³ has so aptly said in regard to the use of version: "That a fallacy surrounds the frequent use of all operative procedures; the practitioner who turns all children or who puts forceps on all heads will, of course, get the best percentage in the results of operation cases, but will by no means save the most women and children."

Against the employment of version it has been urged that the fetus is liable to suffer from many accidents. Fractures of the bones of the upper and of the lower extremities have occurred, while serious or fatal injuries connected with the chest, with the spine, and with other parts have not infre-

¹ See Braithwaite's *Ret.*, part 90, p. 190.

² *Op. cit.*, p. 189.

³ *Op. cit.*, p. 190.

quently resulted. The occurrence of such mishaps has undoubtedly taken place in those cases in which proper discrimination as to choice of the best means of delivery has not been exercised. It may be laid down as a general rule that in all cases in which the antero-posterior diameter of the pelvis of the mother is less than six centimetres, version should not be attempted. In applying this rule other important factors in some cases will have to be taken into consideration. The employment of forceps with axis traction in high operations is by no means unattended in all cases with serious injury to the fetus. Fracture of the cranium, compression of the brain, lesion to the great nerves and to other parts, are often sustained. The induction of premature labor, the employment of craniotomy, when done under the strictest antiseptic precautions, cannot but expose the mother to many dangers. The employment of the Cesarean section, the adoption of Porro's operation, in those cases in which they are most clearly indicated, can never be attempted without the patient's assuming many risks, and such operations, before being undertaken for relief in any class of cases, must ever be regarded as measures requiring the profoundest consideration.

693 MAIN STREET.

MEDICAL JOURNALS

PUBLISHED BY

WILLIAM WOOD & COMPANY.

MEDICAL RECORD.

A WEEKLY JOURNAL OF MEDICINE AND SURGERY.

Edited by GEORGE F. SHRADY, A.M., M.D.

Price, \$5.00 a Year.

The **Medical Record** has for years been the leading organ of the medical profession in America, and has gained a world-wide reputation as the recognized medium of intercommunication between the profession throughout the world. It is intended to be in every respect a medical newspaper, and contains among its **Original Articles** many of the most important contributions to medical literature. The busy practitioner will find among the **Therapeutic Hints** and in the **Clinical Department** a large fund of practical matter, carefully condensed and exceedingly interesting. **Medical News** from all parts of the world is supplied through special correspondents, by mail and telegraph; **New Publications and Inventions** are reviewed and described; and in the **Editorial Department** matters of current interest are discussed in a manner which has established the **Medical Record** in the estimation of the whole profession as a thoroughly independent journal and the most influential publication of its class.

THE AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Price, \$5.00 a Year (Issued Monthly).

This is not a special journal, as such are usually understood. As it gives special attention to lines which, more than any other, go to form the everyday experience of the general practitioner, its scope of usefulness is very wide.

The original articles appearing in its pages are selected with a view to their practical value and general interest, and include many contributions from writers of wide celebrity and established reputation.

The **Journal** is not the organ of any society, being entirely independent, and consequently free to select for publication only such matter as will be most useful to its subscribers.

Society Proceedings, Book Reviews, and Abstracts of current literature in its scope are carefully prepared features which and to the completeness of the **Journal**.

In order to add to its usefulness and attractiveness, special attention is given to the matter of illustrations, and all articles admitting of it are copiously illustrated by every available means. In fact, the **Journal** is presented in a form of typographical excellence unequalled by any other medical journal. A specimen copy will be sent free, if desired.

PRICES AND CLUB RATES:

Medical Record (Weekly),	- - - -	\$5.00 a year.
American Journal of Obstetrics (Monthly),	-	5.00 a year.
And when mailed to the same address and paid for according to our terms:		
Medical Record and Journal of Obstetrics,	-	\$9.00 a year.

At the above low rates only when paid in advance to William Wood & Company or their Agents, NOT the Trade.

WILLIAM WOOD & COMPANY, 43, 45, & 47 East 10th Street, New York.

